

IN 1990, Wisconsin enacted laws to prohibit the release of certain refrigerants (chlorofluorocarbons, also known as CFCs or "freon") during the service or disposal of refrigeration or air-conditioning equipment. These substances have been destroying the earth's ozone layer, high in the atmosphere, which protects life from the sun's harmful ultraviolet radiation. Subsequent state and federal laws have added other ozone-depleting refrigerants (HCFCs, like R-22) and their substitutes to these requirements.

The state laws led to three regulatory programs controlling those who handle refrigerants. The Department of Agriculture, Trade and Consumer Protection (DATCP) regulates those who service vehicle air conditioners and the Department of Commerce (COMM) regulates persons who service "stationary" equipment (appliances, building, commercial and industrial).

The Department of Natural Resources (DNR) developed Chapter NR 488 to regulate activities during the disposal of any equipment containing ozone-depleting refrigerants.

WHO IS COVERED?

"SALVAGERS" - Any public or private entity responsible for salvaging or dismantling entire refrigeration or air-conditioning units* which may contain ozone-depleting refrigerants must register with the DNR and certify the use of approved refrigerant recovery equipment by qualified operators.

"SAFE TRANSPORTERS" - Any public or private entity which transports refrigeration equipment for the purposes of salvaging or dismantling must certify to the DNR that they will use methods to "safely transport" the equipment, thus preventing refrigerant releases.

*called "refrigeration equipment" in this brochure

HOW DO "SALVAGERS" COMPLY?

Persons who salvage or dismantle entire units of refrigeration equipment must register annually with the DNR (Form 4500-129), certifying that they are using approved equipment to recover any remaining refrigerants and that persons using this equipment are properly qualified. The annual registration fee is \$250, or \$125 if the operation is already registered in the DATCP or COMM programs and salvages or dismantles as a minor activity incidental to providing repair services.

Refrigeration equipment salvagers may make arrangements for someone else to perform the refrigerant recovery, but still must register with DNR (unless that facility is already registered). The "subcontractor" must use approved recovery equipment operated by properly qualified operators, and records of recovery activities must be kept. A description of this arrangement must be included in the salvager's registration.

WHAT IS "APPROVED" RECOVERY EQUIPMENT?

Salvagers must use recovery equipment approved by DATCP, COMM or DNR. Each facility should carefully consider its special needs before purchase of a unit. Generally, the NR 488 code specifies that the recovery equipment must be approved for safety and efficiency by a recognized national lab (such as UL or ETL) and must be capable of recovering at least 90% of the refrigerant.

Vehicle salvage operations will purchase recovery-only equipment to transfer the R-12 and R-134a into properly color-coded and labeled storage tanks (approved by the US Department of Transportation). This used refrigerant can be sold to persons registered by DATCP who will purify and re-use it to service vehicle air-conditioners. The used refrigerants can also be sold to persons authorized to reclaim the refrigerant to original purity standards before resale.

Appliance salvagers will need to obtain equipment to recover several refrigerants. Special care must be taken in recovery from appliances, since at least two different types of refrigerants will be encountered (older refrigerators and freezers usually contain R-12, while air conditioners use R-22). Mixed refrigerants cannot be separated or re-used and may need to be handled and destroyed as a hazardous waste, which can be very costly. Some used appliance repair/resale facilities may decide to recycle refrigerants for their own re-use, but this recycled refrigerant may not be sold to others for their re-use. Recovered, used refrigerants can only be sold to authorized facilities which will reclaim it (purify to original specifications) before being sold for re-use.

HOW DO RECOVERY EQUIPMENT OPERATORS GET QUALIFIED?

Individuals who use refrigerant recovery equipment for salvage must successfully complete an appropriate certification program approved by DATCP, COMM or the DNR, or must be directly supervised by someone who has completed one. DATCP-approved training programs must be utilized by those recovering refrigerants from vehicle air conditioners. Those recovering from "stationary" equipment must hold a COMM-approved "refrigerant handler" credential. DNR-approved programs may be used for either type of equipment, if available.

Training programs approved by DATCP and DNR present the basics of ozone depletion, applicable state and federal laws, recovery equipment operation and safety, and a proficiency test. These courses are offered by vocational schools, equipment manufacturers, trade associations and others around the state.

Lists of currently approved training programs are available.

DOCUMENTING REFRIGERANT REMOVAL TO SCRAP METAL PROCESSORS

Under state and federal law, any person who sells, gives or transports salvaged refrigeration equipment to a scrap metal processor must provide a signed statement that all remaining refrigerant has been properly recovered by themselves or another person. Request a form for this purpose.

If the scrap metal processor agrees to perform the recovery, they must provide a similar statement to anyone delivering the refrigeration equipment for salvage. Both types of documentation must be retained for three years.

SALVAGER RECORDKEEPING

Besides the documentation explained above, certain records must be kept by salvagers for three years. These include:

- Training certificates for each person who operates or supervises the operation of recovery equipment.
- The brand, model number and serial number of each recovery unit.
- The type and quantity of refrigeration equipment salvaged (e.g. # of refrigerators, freezers, vehicles, etc. per month or week).
- Records of the repair and maintenance of recovery equipment, including the date and nature of each repair or maintenance activity.

Records of any refrigerant sales (type, amount, date, recipient) must also be retained.

PENALTIES

The DNR can issue a citation of \$100 to \$1000 for each release of refrigerants or other action in violation of these provisions.

WHAT IS "SAFE TRANSPORT"?

Prior practices for handling salvaged refrigeration equipment sometimes ruptured the system, releasing refrigerants into the environment. State law requires that anyone transporting salvaged refrigeration equipment (except for individuals hauling their personal items and those hauling vehicles) must certify annually to the DNR that they will transport items in a manner which prevents refrigerant releases. Thus, methods such as collecting appliances loose with other salvaged metals in roll-off boxes or by "throwing onto trucks" can no longer be used. No particular method is prescribed, but using lift-gate trucks, trailers with ramps, loading docks, or securing appliances in roll-off boxes can provide the needed safety. Common sense and concern for worker safety are good guidelines to follow.

To make the required certification, transporters must submit Form 4500-130 annually, along with a \$75 fee, plus \$25 for each vehicle expected to be used for safe transport during the coming year.

The \$75 fee is waived for those registered as refrigeration equipment "salvagers," as described in this brochure. Receipt forms provided by the DNR must be kept at your facility and in each vehicle while valid.

* FOR MORE INFORMATION OR FORMS *

WRITE TO:

Bureau of Air Management Refrigerant Program
Wisconsin Department of Natural Resources
PO Box 7921, AM/7
Madison, WI 53707-7921

OR CALL: 608/264-6049

For information on federal EPA refrigerant recovery requirements, call 1-800-296-1996.

OZONE-DEPLETING REFRIGERANTS AND SALVAGING OPERATIONS



Compliance With Chapter NR 488, Wisconsin Administrative Code and Section 285.59, Wisconsin Statutes

